is both competitive and highly dynamic, regulators should adopt policies that promote innovation and consumer choice. Accordingly, except where it is a monopolist controlling an essential facility, a broadband facilities owner should not be required to share its plant with unaffiliated third parties.

2. Mandatory Common Carrier Requirements Are Not Necessary and Would Not Benefit Consumers

A second argument made by some "open access" proponents is that the public interest will be served only if all broadband service providers are required to provide a separate telecommunications service and interconnect on a nondiscriminatory basis with all unaffiliated ISPs. However, there is absolutely no evidence that all broadband services must be subjected to common carrier regulation to ensure that the broadband marketplace develops or that American consumers are well-served. To the contrary, the facts reveal that the imposition of common carrier obligations on competitive service providers would only slow (or even halt) broadband deployment, increase costs, undermine innovation and limit competitive entry. Past government efforts to force service providers into a common carrier business model have been far from successful. One need simply look to video dialtone and the open video service for compelling examples of a failed "open access" approach.

Moreover, the only way to successfully impose common carrier obligations on broadband service providers is to force them all into the "dumb pipe" transport business. Unlike the incumbent telephone companies, however, most broadband providers have not chosen to offer a pure transmission service that can be used without restriction as an input to create a more sophisticated product. This decision has been driven both by limits imposed by the providers'

long-standing network design[33] and by their need to pursue a business plan that will enable them to recoup their enormous investments in new broadband technology. Forcing them to completely redesign (not just upgrade) their networks and revamp their business plans makes no sense in a competitive marketplace where government is encouraging providers to deploy broadband services as rapidly as possible.

Policymakers also should not ignore the history of common carriage – a centuries-old concept that is tied closely to the idea of limited competition. Under English common law, a designated provider (such as a ferry boat) was granted an exclusive right to serve a given area. In exchange, the service provider was obligated to carry all comers at rates announced in advance.[34] The imposition of common carrier requirements thus served as the *quid pro quo* for the profitable designation as a protected service provider. This arrangement was then imported wholesale to the United States, being applied first to the transportation industry and, thereafter, to the telephone industry.[35]

The imposition of common carrier requirements on telephone companies more than a century ago has served the country well. Enjoying exclusive franchises, a guaranteed rate of return and a variety of explicit and implicit government subsidies, telephone companies built a telecommunications network that provides universal service to American consumers on a non-discriminatory basis. Moreover, the very ubiquity of this network, and its corresponding obligation to carry all traffic, helped to ensure the emergence of the Internet and a wide variety of ISPs.

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[33] For example, neither cable nor direct-to-home satellite systems originally were designed to handle two-way traffic, and reconfiguring those networks to introduce two-way capability is extremely difficult and expensive.

[34] Thorne, Huber and Kellogg, FEDERAL BROADBAND LAW, at § 5.1 (Little , Brown and Company 1995).

[35] *Id.*

In the competitive broadband marketplace, however, government will be unable to strike the traditional "common carrier" bargain with new service providers because they enjoy neither protected service areas nor market power. Far from being granted an exclusive franchise, broadband entrants are raising capital and constructing and upgrading networks at their own risk. The assumption of this risk – without the guarantee of a government-backed rate-of-return – inescapably distinguishes non-telephone broadband service providers from more traditional common carriers such as the incumbent telephone companies.

On the other side of the coin, new broadband providers need not be compelled to indiscriminately serve all ISP comers to achieve the government's objective that all American consumers have the opportunity to purchase Internet access. As shown in the preceding section, consumers do have a wide and growing choice of ways to connect to the Internet. Once connected, moreover, they are able to visit any website and access any information (or any ISP) that they desire.[36] Since virtually every consumer is able to find a way onto the Internet,[37] broadband service providers need not be forced to carry all ISPs indiscriminately to ensure that the American public will be served. Moreover, to the extent that the Commission wishes to promote "widespread and rapid deployment of high-speed services" in particular,[38] it is difficult to see how that goal would be served by mandating common carrier requirements for all broadband service providers, given the enormous operating burdens, costs and delays that establishing and enforcing such requirements would impose on industry and regulators alike.[39]

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[36] This unfettered access means that broadband customers already are "interconnected" to all other providers and all other ISPs, regardless of whether their service provider is affiliated with one or multiple ISPs.

[37] Cox recognizes that there may be certain small areas where no access is available.

[38] *Notice*, ¶ 2.

[39] Indeed, there are significant administrative and compliance costs associated with cost-of-service regulation, which imposes heavy burdens on regulators and regulated entities, not to mention the costs incurred through the oversight

The far better course is to let participants in the developing broadband marketplace choose their own business model. Not surprisingly, many new entrants may opt not to pursue a pure common carrier approach. Indeed, a number of broadband service providers to date have associated themselves with a single ISP.[40] Their decision to do so has been dictated by marketplace realities, including technical and operational limitations,[41] the need to raise enormous amounts of risk capital and the resulting business model constraints. These service providers might well have stayed out of the market altogether had they been forced initially to comply with interconnection and non-discriminatory carriage requirements.

However, as Cox's own experience suggests, broadband service providers are facing growing competitive pressure to offer their customers a choice of ISPs. Service providers that already do so (such as DSL companies) are now touting ISP choice as a service differentiator and consumer marketing advantage. To remain competitive, Cox and other broadband providers are actively exploring how to carry more than one ISP on their networks to enhance consumer choice. Since Cox will be seeking out relationships with ISPs that add value to its customers, its carriage will not be indiscriminate (as would be the case under a common carrier approach). Yet consumers clearly will be better served because Cox has every market incentive to enter into

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of interconnection arrangements. Moreover, carriers will suffer capital losses due to the investment disincentives that would be created through implementation of common carrier regulation.

[40] Starpower, with its advanced fiber optic network, for example, has chosen to join forces with Lycos. *See* <http://www.starpower.net/>. Sprint has teamed with Earthlink for its long distance and Internet package. Other broadband service providers plan to accommodate multiple ISPs. *See* <http://csg.sprint.com/internet/>. DirecPC, for instance, already accommodates AOL and has recently announced an agreement allowing EarthLink to offer two-way high-speed satellite Internet services. *See* <http://www.newsbytes.com/pubNews/00/157237.html> and <http://www.earthlink.net/about/pr/direcpc.html>.

[41] As discussed in Section IV below, it would not be technically possible to treat cable modem service (or other shared network) providers as traditional common carriers in any event.

business relationships with those unaffiliated ISPs that can offer additional enhancements and high-quality service to its customers.

In short, the competitive broadband marketplace is working. The imposition of mandatory common carriage obligations on all service providers would serve no public interest and, in fact, would be detrimental to the prompt deployment of broadband services.

III. THE SHARED SPECTRUM ON CABLE HIGH-SPEED DATA NETWORKS PRECLUDES THE IMPOSITION OF COMMON CARRIER OBLIGATIONS AS A MATTER OF PHYSICS AND NETWORK FUNCTIONALITY

The hallmark of high-speed Internet service provided over broadband cable networks is its high speed. The question of "open access" to the cable platform cannot be divorced from the question of how such access by third-party ISPs would affect Cox's ability to maintain the service's high-speed characteristics and to provide the reliable, high-quality service its customers demand. As demonstrated below, imposition of an immediate, open-ended, common carrier-type regulatory obligation on cable systems to serve all ISP comers on an indiscriminate basis is impossible, as a matter of physics and network functionality. Third-party ISP access can be accommodated only by the cable operator's judicious management of the spectrum it has created on its network for high-speed data services, under commercially reasonable terms and conditions.

As previously noted, in the wake of the 1996 Act, Cox will spend nearly $10 billion on network improvements, including installation of additional fiber optic cable, "hardening" of system head-ends for improved reliability, installation of management information systems and cable modem terminating systems, and expenditures of incremental capital outlays for items such as cable modems, advanced set-top boxes and telephone network interface units. These improvements increase the capacity of Cox's cable networks from 550 MHz to 750 MHz and

enable them to reliably carry two-way traffic. The improvements are necessary to allow Cox to provide advanced two-way digital video, voice and data services over its cable plant.

Once Cox's cable networks have been upgraded from 550 MHz to 750 MHz, the total amount of spectrum available for the new digital services is about 200 MHz, which includes about 40 MHz reserved for return path (upstream) transmissions. Since Cox must add at least 120 more video channels to offer programming services that are comparable and competitive to existing DBS services, the bulk of the added network spectrum capacity is devoted to video, pay-per-view and video-on-demand content. An additional 20 MHz is allocated for new digital voice services (10 MHz upstream and 10 MHz downstream), and 16 MHz is allocated for digital high-speed data service (12 MHz downstream and 4MHz upstream). Finally, about 15 MHz is unusable for customer services because it must be devoted to separating the upstream digital traffic from the downstream digital traffic to prevent interference. In short, Cox already has allocated virtually all of the additional 200 MHz added by its system upgrades to new competitive services (120 + 40 + 10 + 12 + 15 = 197 MHz).

The point here is very simple and very straightforward: Cox has allocated 16 MHz of spectrum for high-speed Internet service out of a very limited amount of new spectrum inventory. It is true that, over time, new capacity can be squeezed from its 750 MHz platforms.[42] But for the time being, Cox's high-speed Internet service will have to operate within the 16 MHz of spectrum that Cox has allocated for that service because there is no additional spectrum to be had for this purpose.

[42] Statistical multiplexing, modification from 64 QAM to 256 QAM, conversion of analog channels to the digital tier and finally node splitting can recover additional spectrum -- over time and at considerable additional expense. But it also is true that substantial new claimants for programming content, including HDTV and rapidly expanding video-on-demand, will contend for much of the reclaimed capacity.

This spectrum constraint brings up a profoundly important difference between the topology of a cable network high-speed Internet service and a telephone network high-speed DSL service. In the case of access by third-party ISPs, a DSL loop can be made available by the ILEC or CLEC for whatever use the ISP can get out of it. The only limit on data rates for ISPs using DSL loops in this manner is the limitation of the loop itself. It is wholly independent of the telephone network's basic telephone operations. However, as will be discussed in greater detail below, the cable network does not have a discrete loop that can be turned over to a third-party ISP. Rather, the amount of spectrum allocated by a cable operator for high-speed Internet service must be shared in two ways: as a result of the number of subscribers that new third-party ISPs sign up, and as a result of the type of data or content being sent by each third-party ISP.

Since "high-speed" service is defined by the FCC as the provision of service at a minimum bit rate of 200 Kbps upstream and downstream,[43] the question is, how will Cox's 16 MHz of high-speed data spectrum be affected by allowing third parties to share this allocation? The answer depends upon two variables. First, how will third-party access affect the number of end users in each node? And second, what will be the data rates of third-party ISP users and their customers?

With respect to the first question, Cox's network is upgraded so that, on average, there are about 650 homes per node. The current spectrum allocation allows Cox, for the time being, to provide high-speed Internet service to new and existing customers without falling below the FCC's definition. However, it is possible that a third-party ISP (or on-line service provider)[44]

[43] *Second Section 706 Report* at ¶¶ 11-14. Notably, Cox has found that customers generally demand a service that exceeds 200 Kbps upstream and downstream. Through experience in the market, Cox has determined that a 3 Mbps upstream/256 Kbps downstream best serves its customers' needs.

[44] OSPs provide content as well as an on-ramp to the Internet.

using Cox's high-speed data spectrum (such as AOL with 28 million customers) could so increase the penetration of users within a series of nodes that service to the entire customer base, including Cox's, would fall below the data rates that the pre-existing customer base has been assured.

The issue of data rate reliability could become quite significant if several ISPs with large narrowband customer bases were to gain access to Cox's high-speed data spectrum through regulatory mandate and Cox could not control the service installation rate in each node. The technical remedy to this problem is not complicated. Cox can install fiber optic lines closer to its end users and split its service nodes to increase capacity and maintain the advertised data rates for its high-speed Internet service. However, this undertaking is both expensive and time consuming and would take substantial cooperation between Cox and its interconnected ISPs in order to succeed.

It will take Cox approximately six years, from the date of the 1996 Act, to finish upgrading its systems from 550 MHz to 750 MHz, at a cost of $10 billion. Since it embarked upon these substantial system upgrades, Cox has been operating a cash flow negative business. Going forward, it is an understatement that Cox's creditors and stockholders will be impatient to see its substantial capital investments end. They will be equally impatient to see these investments producing free cash flow. Cox cannot endlessly operate a cash flow negative business.[45] Therefore, any additional upgrading of Cox's cable systems will have to be accomplished so that Cox can continue to operate in a prudent and business-like manner.

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[45] *See* John M. Higgins, Grading the MSOs, Broadcasting and Cable, at 42-52, Nov. 27, 2000 (interview with Morgan Stanley Dean Witter media analyst Richard Bilotti, noting that Cox is an industry leader with respect to capital expeditures and affirming that the time for returns on investment has arrived).

Prudent operation includes, at a minimum, the ability to recover the additional costs of providing third-party ISP access from the cost-causative ISP, as well as a reasonable return on investment. The effect of these cost increases on retail prices, and thus on consumers, should not be underestimated.

With respect to the second issue, Cox will need to manage what the upstream and downstream data rates of third-party users of its data spectrum will be. Cox notes that Internet usage will change substantially in the coming years as new bandwidth-hungry applications emerge. As previously noted, today many Internet users limit their activities to web surfing and e-mail applications, neither of which requires very high data rates.[46] But Internet Protocol telephony and streaming video applications are on the horizon. These new services will put even more pressure on the 16 MHz of spectrum capacity that Cox has allocated for the provision of high-speed Internet services. Again, the expensive and time-consuming solution is to extend fiber deployments so that fewer users are connected to each node. Cox also will need to implement some of its bandwidth recovery strategies noted earlier. But these solutions are neither instantaneous nor inexpensive.

As Cox has stated publicly, it is in the company's interest to offer its customers a choice of ISPs. It intends to seek relationships with unaffiliated ISPs after its contractual obligation to @Home expires. To that end, Cox plans to commence a test of its shared broadband high-speed data infrastructure with several unaffiliated ISPs during the first half of 2001. But the

[46] A recent PricewaterhouseCoopers Consumer Technology study reportedly found that consumers are spending even less time web surfing this year, and are demonstrating little enthusiasm for broadband applications such as downloading video streaming videos or short films. Ken Kerschbaumer, *Is the Web losing its leisure-time appeal?*, BROADCASTING & CABLE, November 6, 2000, at 42. This may be seen as further evidence that the young broadband marketplace continues to exist in a state of flux and uncertainty while both consumers and service providers sort out their desires and priorities.

contractual terms and conditions under which such ISPs are given access to Cox's high-speed data spectrum must allow Cox to control the rate and manner of new end-user hookups, and third-party ISP upstream and downstream data rates. Cox must manage this transition not only so that existing high-speed data customers can continue to receive the data rates and service reliability that they have been promised, but also so that Cox can undertake additional capital spending for high-speed data network capacity in an economically prudent manner.

The significance of these technology issues is central to any discussion about third-party access to Cox's high-speed data spectrum. Setting aside all questions about whether there is any jurisdiction or marketplace predicate for the imposition of common carrier access regulation on cable-provided Internet services, such a regulatory scheme cannot be made to work as a matter of physics and network functionality, and should not be imposed.

IV. CABLE INTERNET SERVICES ARE INTERSTATE INFORMATION SERVICES UNDER THE COMMUNICATIONS ACT.

In the wake of several inconsistent federal court decisions concerning the proper regulatory classification of cable Internet service,[47] the Commission observes that it ". . . has not itself resolved that exceptionally complex dispute . . . ." Cox believes that a rigorous analysis of the Communications Act and Commission precedent on this issue leads to an inescapable conclusion: in addition to meeting the definition of Title VI "cable services," cable Internet services also are properly classified as Title I information services. The Communications Act defines an information service as a service that, using telecommunications, offers users the

[47] *Compare AT&T Corp. v. City of Portland*, 216 F.3d 871, 877 (9th Cir. 2000) (suggesting in dicta that cable modem service comprises both a "telecommunications service" and an "information service.") ("*Portland*") *with Gulf Power Co. v. FCC*, 208 F.3d 1263, 1275-78 (11th Cir. 2000) (holding that Internet service is neither a cable service nor a telecommunications service) *and MediaOne Group, Inc. v. County of Henrico*, 97 F.Supp.2d 712, 714 (E.D. Va. 2000), *appeal pending*, 4th Cir. No. 00-1680 (concluding that cable modem service is a cable service).

ability to generate, acquire, store, transform, process, retrieve, utilize or make available information. Because Cox's cable Internet services enable customers to do each of these things, they squarely meet the information service definition set forth in Title I of the Act.

Besides being dictated by the relevant statutory language and FCC pronouncements, a Title I classification for cable Internet service also has the benefit of accomplishing the Commission's three primary policy objectives in this proceeding. First, a Title I information services classification enables the Commission to refrain from regulating cable Internet services under current competitive market conditions, in which there is no evidence of market failure. Second, it permits the Commission to develop a coherent national policy with respect to the development and deployment of broadband services in general, and cable data services in particular. And third, a Title I classification ensures that the Commission has ample ability and authority to implement rules to correct any market failures or other policy concerns about cable data services that might develop in the future.

Significantly, as interstate information services, cable Internet services are not subject to any common carriage or telecommunications service obligations under Title II of the Act. Relying both on the relevant statutory provisions and its own longstanding precedent, the Commission repeatedly has held that information services and telecommunications services are mutually exclusive categories. This distinction makes perfect policy sense. Information service providers do not provide pure transmission services on an indiscriminate basis to the public at large. Rather, they simply use telecommunications as an input for services that enable customers to manipulate information in some fashion. Given that information services are a far cry from the "dumb pipe" offerings provided by telecommunications service providers, it is no surprise

that the Commission, the Congress and the courts all have refused to impose common carrier burdens on information service providers.

A. Cable Internet Service Meets the Statutory Definition of an "Information Service"

The *Notice* requests comment on the "variety of legal or policy frameworks that might apply to cable modem service and the cable modem platform."[48] In particular, the *Notice* suggests that there "may be a number of regulatory approaches possible, from treating cable modem service and/or the cable modem platform as a cable service subject to Title VI; as a telecommunications service under Title II; as an information service subject to Title I; or some entirely different or hybrid service subject to multiple provisions of the Act."[49] Regardless of whether they also qualify as Title VI cable services,[50] cable Internet services qualify as information services within the meaning of Section 3(20) of the Act.

Section 3(20) defines "information services" as services provided "via telecommunications"[51] that offer the user the "capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information[.]"[52] The Commission has long classified Internet access services as information services, observing that

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[48] *Notice* at ¶ 15.

[49] *Id.*

[50] Comments of the National Cable Television Association; Barabara Esbin, *Internet Over Cable: Defining the Future in Terms of the Past* (OPP Working Paper Series No. 30, 1998) ("*Internet Over Cable*"), *published* in 7 COMMLAW CONSPECTUS J. COMMS. L. & POL'Y 37, 97 (Winter 1999) (although the FCC could reasonably conclude that cable Internet service when provided by a cable operator over its cable system comes within the amended definition of "cable services" under Title VI, "there is nothing inherent in the nature of enhanced and information services that places them outside the potential scope of cable services for regulatory purposes.").

[51] "Telecommunications" is defined separately in the Act as "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information sent and received." 47 U.S.C. § 153(43).

[52] 47 U.S.C. § 153(20).

ISPs provide Internet access, e-mail, web-hosting, and a variety of related applications that meet the statutory definition in Section 3(20) of Title I.[53]

Cox's cable data services offer end users the same Internet connectivity and applications as ISPs such as Earthlink and AOL. Indeed, cable Internet services such as Cox@Home offer consumers the ability to perform each of the functions within the definition of information services. For example, Cox@Home permits users to retrieve and utilize information from web sites and from local or distant servers. Cox@Home also permits users to store and process information in e-mail applications, and to retrieve information through file downloads, including video and audio clips. In addition, Cox@Home, like many other ISPs, provides local home pages for its subscribers. These local home pages offer content that is selected and made available by the cable operator, including local weather, sports and news.

Furthermore, cable Internet services are offered "via telecommunications," consistent with the statutory definition, just like the information services offered by other ISPs. Cox uses a combination of its own cable infrastructure and the infrastructure of third parties to provide its cable Internet services. By leveraging the telecommunications connectivity provided by that infrastructure, Cox is able to offer its cable data customers all of the functionality described in the information services definition. Thus, like all other ISPs, Cox provides its information processing capabilities "via telecommunications," as required by Section 3(20) of the Act.

[53] *See* Federal-State Joint Board on Universal Service, *Report to Congress*, 13 FCC Rcd 11501, 11539-40 (1998) ("*Report to Congress*").

B. Cable Internet Service Providers Do Not Provide a Telecommunications Service

The *Notice* requests comment on whether cable Internet service is a "telecommunications service" subject to Title II of the Act.[54] The short answer is that Cox, like other ISPs, does not provide a telecommunications service as that term is defined by the 1996 Act.

Section 3(46) of the Communications Act defines a "telecommunications service" as "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used."[55] Even a cursory examination of Cox's cable Internet service reveals that there is no way to push this "square peg" into the telecommunications service "round hole." As explained below, Cox and other ISPs do not offer "telecommunications for a fee directly to the public" simply by virtue of providing Internet access. Indeed, treating cable's provision of broadband Internet access as a telecommunications service would be directly contrary to the Commission's earlier conclusions that Internet access service is not itself a telecommunications service, but rather an information service.

1. "Telecommunications Services" and "Information Services" Are Mutually Exclusive

According to the Commission, Congress adopted the definition of "telecommunications service" in the 1996 Act to clarify that telecommunications services are common carrier services.[56] The Commission's rules define a communications common carrier as "any person

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[54] *Notice*, ¶ 18.

[55] 47 U.S.C. § 153 (46).

[56] *See* Cable & Wireless, *Cable Landing License*, 12 FCC Rcd 8516, 8521 (1997). The 1934 Act defines "common carrier" as "any person engaged as a common carrier for hire, in interstate or foreign communications by wire . . . ." 47 U.S.C. § 153(10).

engaged in rendering communications for hire to the public."[57] Moreover, in *NARUC I* and other decisions, the courts have held that the indiscriminate offering of a service to the public is an essential element of common carriage.[58]

Thus, a service is not a telecommunications service unless it involves the direct and nondiscriminatory offering of telecommunications to the public for a fee.

> Indeed, the primary *sine qua non* of common carrier status is a quasi public character, which arises out of the undertaking to carry for all people indifferently. This does not mean that the particular services offered must practically be available to the entire public; a specialized carrier whose service is of possible use to only a fraction of the population may nonetheless be a common carrier if he holds himself out to serve indifferently all potential users.[59]

The Commission has long held that information service providers do not offer common carrier telecommunications services. The distinction between the two types of services was first observed in the Commission's landmark *Computer I* proceeding and its progeny.[60] In *Computer II*, the Commission drew a bright line between what it termed the "basic services" offered by common carriers and the "enhanced services" offered over these carriers' facilities.[61] The

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[57] 47 C.F.R. § 21.2.

[58] *National Ass'n of Regulatory Util. Comm'rs v. FCC*, 525 F.2d 630, 641 (D.C. Cir.), *cert denied*, 425 U.S. 992 (1976) ("*NARUC I*").

[59] *Southwestern Bell Telephone Co. v. FCC*, 19 F.3d 1475, 1480 (D.C. Cir. 1994) ("*Southwestern Bell*") (citing *National Ass'n of Regulatory Util. Comm'rs v. FCC*, 533 F.2d 601 (D.C. Cir. 1976) ("*NARUC II*") and *NARUC I*)). If a carrier chooses its customers on an individual basis and determines in each particular case "whether and on what terms to serve" – and there is no regulatory compulsion to serve all indifferently – the entity is a private carrier and cannot be subjected to common carrier regulation. *NARUC II*, 533 F.2d at 608-09; *see also* Norlight, *Declaratory Ruling*, 2 FCC Rcd 132, *recon. denied*, 2 FCC Rcd 5167 (1987) (finding that a proposed fiber optic network operation would constitute private carriage because the carrier screened potential customers before allowing them to use the network).

[60] *See* Regulatory and Policy Problems Presented by the Interdependence of Computer and Communication Service and Facilities, *Tentative Decision*, 28 F.C.C.2d 291, 295 (1970) ("*Computer I Tentative Decision*"). Indeed, *Computer I* was initiated in 1966 to address (among other things) the potential regulatory issues that arose from allegations that data processing companies were offering services that might constitute common carriage, while common carriers were about to start using their new electronic switches to offer data processing services.

[61] *See* Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), *Final Decision*, 77 F.C.C.2d 384, 423 (1980) ("*Computer II Final Decision*").

Commission placed all services offered over a telecommunications network into one of these two categories. "Basic service" was defined as the offering on a common carrier basis of pure "transmission capacity for the movement of information." "Enhanced service" was defined as anything more than a basic transmission service.[62] Enhanced services included those services that "employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored information."[63]

By definition, both types of service were transmitted over the public switched telephone network. Enhanced services resembled traditional communications services in some respects, but also made use of a computer data processing capability. Thus, *despite the embedded telecommunications transport component,* the Commission determined that enhanced service providers were not "common carriers" within the meaning of the Communications Act and hence were not subject to common carrier regulation under Title II of that Act.[64] Basic service providers, by contrast, were found to be providing common carrier services.

The Commission stated that it had tried to draw the line between the two services "in a manner which distinguishes wholly traditional common carrier activities, regulable under Title II of the Act, from historically and functionally competitive activities not congruent with the Act's traditional forms."[65] The Commission recognized "the existence of a communications

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[62] *Id.* at 419.

[63] 47 C.F.R. 64.702(a); *see also Computer II Final Decision*, 77 F.C.C.2d at 419-21.

[64] *See Computer II Final Decision*, 77 F.C.C.2d at 430; *see also* 47 C.F.R. § 64.702(a) ("Enhanced services are not regulated under title II of the Act.").

[65] *Computer II Final Decision*, 77 F.C.C.2d at 435.

component" in enhanced services, and further acknowledged that "some enhanced services may do some of the same things that regulated communications services did in the past." At the same time, it observed that there was also a substantial data processing component in all of the enhanced services, over which the agency had never imposed a scheme of regulation.[66] Thus, while enhanced service providers offered their services "via telecommunications," the Commission concluded that they should not be treated as providing common carrier services to their subscribers, and that their services should not be subjected to regulation under Title II of the Act.[67] The Commission justified this categorization by noting that the data services market was actively competitive and had no need of regulatory oversight.[68]

The Commission had occasion to reconsider the distinction between basic services and enhanced services after the passage of the 1996 Act.[69] The Act created new regulatory rights and obligations, many of which turned upon an interpretation of the new statutory definitions of "telecommunications," "telecommunications services," and "information services." In implementing the local competition and universal service provisions of the 1996 Act, the Commission found that the new definitions of telecommunications services and information services "essentially correspond to the pre-existing categories of basic and enhanced services," and that, like their predecessors, they refer to separate categories of services.[70]

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[66] *Id.*

[67] The Commission upheld its "basic"/"enhanced" distinction in *Computer III*. Bell Operating Company Safeguards and Tier I Local Exchange Company Safeguards, *Report and Order*, 6 FCC Rcd 7571 (1991).

[68] *See Computer II Final Decision*, 77 F.C.C.2d at 433 ("We expect the competitive environment within which data processing services are now being offered to result in substantial public benefit by making available to the public, at reasonable charges, a wider range of existing and new data processing services.").

[69] *Compare* 47 U.S.C. § 153 *with* 47 C.F.R. § 64.702. The Act uses the term "telecommunications service" in place of "basic service," and uses the term "information service" rather than "enhanced service" to denote uses of the communications network that involve some sort of information processing.

[70] *Report to Congress*, 13 Fcc Rcd at 11516.

In the *Non-Accounting Safeguards Order,* for instance, the Commission concluded that "the differently-worded definitions of 'information services' and 'enhanced services' . . . should be interpreted to extend to the same functions."[71] Further, in the *Universal Service Order,* the Commission found that entities providing enhanced or information services are not thereby providing "telecommunications service."[72] It again embraced this interpretation in its *Report to Congress* on universal service, stating unequivocally that "the categories of 'telecommunications service' and 'information service' in the 1996 Act are mutually exclusive."[73] According to the Commission, this determination was consistent with the intent of Congress to preserve the unregulated status of Internet service providers: "We believe that . . . [it is] the intention of the drafters of both the House and Senate bills that the two categories be separate and distinct, and that information service providers not be subject to telecommunications regulation."[74] Imposing on information service providers the broad range of Title II requirements and constraints "could seriously curtail the regulatory freedom that the Commission concluded in Computer II was important to the health and competitive development of the enhanced-services industry."[75]

Importantly, the Commission reaffirmed its earlier conclusion in *Computer II* that information services do not become telecommunications services merely because information services are offered "via telecommunications." Indeed, according to the Commission, Internet

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[71] Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, *as amended, First Report and Order and Further Notice of Proposed Rulemaking*, 11 FCC Rcd 21905, 21955-56 (1996).

[72] *See* Federal-State Joint Board on Universal Service, *Report and Order*, 12 FCC Rcd 8776, 9179 (1997) ("*Universal Service Order*").

[73] *Report to Congress*, 13 FCC Rcd at 11508.

[74] *Id.* at 11523.

[75] *Id.* at 11524.

service providers "'alter the format of information through computer processing applications such as protocol conversion and interaction with stored data,'" while the statutory definition of telecommunications only "includes transmissions that do not alter the form or content of the information sent."[76] Furthermore, the Commission found "that Congress intended to maintain a regime in which information service providers are not subject to regulation as common carriers merely because they provide their services 'via telecommunications.'"[77]

The Commission also determined that an information service provider is not transformed into a telecommunications service provider merely because it constructs and uses its own transmission facilities to offer service. According to the Commission, this approach is consistent with "Congress's direction that the classification of a provider should not depend on the type of facilities used . . . [but] rather on the nature of the service being offered to customers."[78] The Commission further observed that, to the extent an Internet service provider is furnishing raw transmission capacity to itself, "one could argue" that the Internet service provider is "providing

[76] *Id.* at 11516-17 (citing *Universal Service Order*, 12 FCC Rcd at 9180); *see also Report to Congress* 13 FCC Rcd at 11536 ("Internet access providers *do not offer a pure transmission path*; they combine computer processing, information provision, and other computer-mediated offerings with data transport.") (emphasis added).

[77] *Report to Congress* 13 FCC Rcd at 11511. Though few other FCC opinions have discussed the distinction between an "information service" and a "telecommunications service" in comparable depth, several have referenced and reaffirmed the precedents discussed above. The Commission has restated on many occasions its understanding that the provision of Internet access is an information service under the Act. *See* Deployment of Wireline Services Offering Advanced Telecommunications Capability, *Order on Remand*, 15 FCC Rcd 385, 401 (1999) ("information service is provisioned by [an internet service provider] 'via telecommunications' . . . although the Internet service itself is an 'information service' . . . rather than a telecommunications service."); *see also* Application of BellSouth Corp., *Memorandum Opinion and Order*, 13 FCC Rcd 20599, 20781 (1998) ("'[I]nformation services' are not also 'telecommunications services' because the two definitions under the 1996 Act are mutually exclusive."); *INFONXX, Inc. v. NYNEX*, 13 FCC Rcd 10288, 10295 n.49 (1998) (confirming that an information service provider offering voice directory assistance services was not a telecommunications carrier because it did not itself provide the transmission of information).

[78] *Report to Congress*, 13 FCC Rcd at 11530.

telecommunications" – but only to itself, not as either a common or a private carrier.[79] The ISP thus would not be subject to Title II of the Act.

Moreover, the Act's universal service provisions give the Commission discretion to decide whether to require providers of telecommunications to contribute to universal service.[80] Exercising this discretion, the Commission determined that, for reasons of competitive neutrality and fairness, entities that offer telecommunications to third parties on a private carriage basis should be required make universal service contributions. It declined, however, to impose universal service obligations on entities that use self-provided telecommunications as an input to their non-telecommunications services. The Commission further concluded that ISPs should be treated in the same way as other self-providers of telecommunications under the universal service rules.[81] Thus, "where an Internet service provider owns transmission facilities, and engages in data transport over those facilities in order to provide an information service," the provider will not be required to contribute to universal service mechanisms.[82] This analysis establishes that cable Internet service is not properly classified as a telecommunications service simply because a cable operator utilizes its own infrastructure for the telecommunications capacity needed to provide Internet services to end users.

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[79] *Id.* at 11534.

[80] *See* 47 U.S.C. § 254(d). Under Section 254(d), telecommunications carriers that provide "interstate telecommunications services" must contribute to the universal service fund unless they secure a *de minimis* exemption from the Commission. By contrast, providers of "interstate telecommunications" may be required to contribute to universal service, but only if the Commission, in its discretion, determines that the public interest demands that they do so.

[81] *Report to Congress*, 13 FCC Rcd at 11557 (no contributions from entities that self-provision telecommunications to meet internal needs).

[82] *Id.* at 11508. The Commission has not initiated a separate proceeding to determine the universal service support obligations of self-provisioning ISPs or other private network operators.

Legal analysis aside, there also is no policy reason for the Commission to now begin requiring self-provisioning information service providers to carve out the "telecommunications" component of their service offerings for separate regulatory treatment as Title II common carriage. This result would be inconsistent with the way the Commission has treated information service providers in the past, and would cause vast disruptions in the manner in which currently unregulated private networks connect to one another and to the Internet. Any obligation that carves out a telecommunications service component from the integrated information service necessarily would have to extend not only to cable Internet service providers, but also to any other self-provisioning provider, including ISPs, value-added resellers and other private networks.

Indeed, the Internet world is replete with information service providers that have constructed and use their own private facilities to provide all or some of their services. Many universities, for example, provide connectivity to their students and staff via services that carry traffic over university-owned facilities. Students, faculty and others can connect to the Internet and other university resources through these campus networks.[83] Similarly, companies such as PSInet provide Internet backbone services to their customers via self-provisioned private network facilities, which are not now subject to Title II regulation or to any obligation to separate the telecommunications component of their services from the other components.[84] If the

[83] Through the Stanford University Network ("SUNet"), for example, students and faculty can communicate through their computer with anyone on the Stanford University campus and make use of the wealth of campus-wide networked services. Once users are connected, they also have access to the World Wide Web, electronic mail, Telnet, newsgroups, and many other Internet services. *See* <http://acomp.stanford.edu/acpubs/AboutComp/campus.html> visited November 29, 2000. Another example of a university network is MITnet, MIT's campus computer network, which connects computers in offices, laboratories, classrooms, public computer facilities, and dormitories. MITnet provides students with access to the Internet as well as the extensive facilities of Athena, MIT's heavily used academic computing environment.

[84] *See Report to Congress*, 13 FCC Rcd at 11534 (self-provisioning Internet providers are not subject to Title II).

Commission were to conclude that the telecommunications component of an information service is subject to separate regulation, however, universities, Internet backbone service providers and many other network operators also would fall prey to Title II requirements. Indeed, services as varied as Hughes DirecPC, the Microsoft Network and Sony's recently announced content-delivery service all could have their self-provisioned telecommunications capacity opened up to all comers.[85]

In short, there is no way to interpret the definitions of "information service," "telecommunications service" and "telecommunications" that would permit some but not all self-provisioning information service providers to escape Title II regulation.[86] Thus, if cable Internet service were required to tease out a telecommunications service component, any information service provider that self-provisioned any of its telecommunications capacity would be subject to an unbundling requirement for that capacity. Such an outcome cannot be what the Commission envisioned when it initiated the current inquiry.

Significantly, court cases that have addressed the distinction between information services and common carriage have reached similar conclusions. In a set of cases involving commercial online service providers, the central issue was the classification of such entities as either common carriers or information service providers. In one instance, the Ninth Circuit held that an Internet service provider, America Online, was not a common carrier under the Communications Act. In *Howard v. AOL*, the claimants alleged that that AOL had violated the

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[85] *See, e.g.*, <www.multichannel.com/daily/27d.shtml> (private agreement between Hughes and EarthLink for DirecPC); Stephen Lawson, *Comdex: Sony Shows Off Range of Home LANs*, NETWORK WORLD, November 20, 2000 (service to permit consumer access to movies, games and other digital entertainment).

[86] In particular, the definitions of "telecommunications" and "telecommunications service" do not give the Commission any discretion to distinguish between favored and disfavored service providers. *See* 47 U.S.C. §§ 153(43), (46).

Communications Act by assessing unreasonable charges and practices, unreasonably prejudicing some subscribers by favoring others and by failing to protect subscriber privacy. Upholding the district court's determination that AOL is not a common carrier and, therefore, did not so violate the Communications Act, the Ninth Circuit concluded that the Internet service provider could not be a common carrier because "AOL does not act as a mere conduit for information."[87]

Similarly, in the *Portland* decision, the Ninth Circuit correctly observed that the Internet access service provided to end users by a cable provider was an information service. In particular, the court recognized that the Commission generally considers an "ISP itself as providing 'information services' under the Act."[88] The court went further, however, and suggested that the transmission component could be teased out and treated as a "telecommunications service." For the reasons discussed above, the court's dictum that the telecommunications component is a common carrier telecommunications service within the definition of that term in the Act is incorrect. Nonetheless, despite this error, the court appropriately recognized that the Commission's expertise in the area of telecommunications policy might lead it to a different conclusion. The decision does not in any way foreclose the Commission from affirming its earlier determinations regarding the distinct, non-overlapping nature of telecommunications service and information services.

2. Information Service Providers Are Not Subject to Title II

Because they are not telecommunications service providers, information service providers are not subject to the common carriage requirements set forth in the Communications

[87] *Howard v. AOL* 208 F.3d 741, 752-53 (9th Cir. 2000); *accord AOL v. GreatDeals.Net*, 49 F. Supp. 2d 851 (E.D. Va. 1999) ("*GreatDeals*") (deferring to the Commission the interpretation of information service and telecommunications service).

[88] *Portland*, 216 F.3d at 877 .

Act.[89] As the Commission has recognized, "[o]nly those services which are considered to be 'telecommunications services' are subject to regulation under Title II of the Communications Act. 'Information services' are excluded from regulation."[90]

Thus, information service providers are not, for example, required to furnish service upon a reasonable request (Section 201(a)), nor are their charges required to be "just and reasonable" (Section 201(b)). Perhaps most importantly, information service providers are not required to provide access to their network on "an unbundled basis" at "rates, terms, and conditions that are just, reasonable, and nondiscriminatory." (Section 251(c)(3)). This requirement is reserved only for incumbent local exchange carriers as a consequence of their longstanding, state-enforced monopolies over local telephone service.[91] In fact, the Commission has refused to apply similar unbundling requirements to any other carriers.[92]

Information service providers also are not subject to Title II interconnection requirements. While ISPs utilize peering arrangements to interconnect networks and route their customers' data information over the Internet, these arrangements are negotiated privately. Indeed, this "interconnection of commercial backbones is not subject to any industry-specific regulations" of any kind.[93]

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[89] Indeed, to the extent a carrier is providing information services, *i.e.*, non-common carrier services, it would not be subject to Title II as to those services. *See* 47 U.S.C. § 201 *et seq* (discussing Title II common carrier requirements).

[90] Implementation of Section 255 of the Telecommunications Act of 1996; Access to Telecommunications Services, Telecommunications Equipment, and Customer Premises Equipment by Persons with Disabilities, *Notice of Proposed Rulemaking*, 13 FCC Rcd 20391, 20410 (1998).

[91] 47 U.S.C. § 251(c) (additional obligations of *incumbent* local exchange carriers).

[92] *See* Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers, *First Report and Order*, 11 FCC Rcd 15499 (1996) ("*Local Competition Order*").

[93] Michael Kende, Director of Internet Policy Analysis in the Office of Plans and Policy, *The Digital Handshake: Connecting Internet Backbones* (OPP White Paper No. 32), at 22 (rel. September, 26, 2000).

Finally, even if cable Internet service were (incorrectly) considered a telecommunications service, cable operators would have only the limited duty to "interconnect directly or indirectly with the facilities and equipment of other telecommunications carriers."[94] This requirement already has been met by providers of cable Internet service. Rather than being obligated under the Section 251(c)(2) ILEC requirement to provide interconnection at "any technically feasible point," providers subject to Section 251(a)(1) are allowed to interconnect "based on their most efficient technical and economical choices."[95] This obligation can be satisfied by an indirect connection such as existing Internet peering arrangements.[96]

Indeed, because it provides access to the Internet – a network of networks – a cable Internet service provider's network is interconnected indirectly to all other telecommunications carriers whose networks are connected to the Internet. In addition, ISPs already interconnect with one another and with other telecommunications carriers connected to the public switched telephone network at network access points, the public network exchange points that are essential in routing traffic to the Internet. Thus, cable Internet service networks that provide Internet connectivity are already interconnected with the networks of other providers.

V. AS AN INTERSTATE INFORMATION SERVICE, CABLE INTERNET SERVICE IS AND SHOULD REMAIN SUBJECT TO MINIMAL REGULATION.

Cable Internet services are interstate in nature because they provide a continuous connection to an interstate and international facility. As the Commission itself has stated, "although some Internet traffic is intrastate, a substantial portion of Internet traffic involves

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[94] 47 U.S.C. § 251(a)(1).

[95] *Local Competition Order*, 11 FCC Rcd at 15991.

[96] *Id.* In addition, the Commission specifically has held that telecommunications carriers have no obligation to interconnect with information service providers. *Id* at 15990.